

# CHANGES IN ATLANTIC FLYWAY MALLARD HUNTING REGULATIONS, 2019-2020



#### FREQUENTLY ASKED QUESTIONS

The mallard has been one of the most abundant duck species in eastern North America for decades. In the past 20 years, however, eastern mallards have been on the decline. As a result of the long-term decline the **2019-2020** mallard bag limit is being **reduced from 4 per day to 2 per day**. The 2018-2019 bag limit will remain at 4 mallards per day.

### Why is the mallard bag limit being reduced after 20 years of stable regulations?

Mallard populations in eastern North America have steadily declined approximately 20% since 1998. Over the same period, mallard harvest in the U.S. portion of the Atlantic Flyway has decreased by about 40%. Based on the best available data, current data suggests eastern mallards can no longer support a 60 day, 4-bird bag limit. Recent hunter opinion surveys indicate hunters in the Atlantic Flyway value maximizing hunting days afield over maximizing bag limits, so the Atlantic Flyway Council and USFWS chose to <u>restrict the bag limit rather than reduce season length</u>.

# Why did the bag limit go from 4-birds per day to 2-birds per day? Why not 3-birds per day or a shorter season?

The best available data indicate that current eastern mallard populations can only withstand harvest levels that would be expected from a 2-bird bag limit in a full 60-day season. Higher bag limits would necessitate a shorter season to achieve the desired harvest level. Hunters continue to indicate that season length is much more important to them than bag limits; thus, the Atlantic Flyway Council is recommending a 2-bird mallard bag within a full 60-day duck season.

### The annual "Status of Waterfowl" report produced by the USFWS says mallards are nearly at alltime highs. So why is there concern that mallards in the Atlantic Flyway are doing so poorly?

The "Status of Waterfowl" report covers all USFWS breeding waterfowl population survey efforts, including areas that do not affect Atlantic Flyway hunters. Although mid-continent mallards are near record highs, less than 15% are harvested in the Atlantic Flyway and that proportion is even smaller as one moves further north. Accordingly, the status of mid-continent mallards has little bearing on Atlantic Flyway duck hunters. Over 60% of the mallards harvested in the Atlantic Flyway are produced in the Northeastern United States and another 25% come from Eastern Canada.

Many eastern mallards seem to nest in non-traditional wetland sites such as detention basins and residential lakeshores. How do we know the breeding population surveys aren't faulty and that mallard populations are for sure declining?

Breeding waterfowl surveys are conducted during spring when waterfowl are dispersed across the landscape relatively evenly resulting in more reliable population estimates than winter surveys when waterfowl have clumped distributions. Atlantic Flyway biologists use the composite from 2 spring

surveys across the primary breeding range of eastern mallards to estimate population size. Both surveys have been conducted annually for 20 years and sample consistent geographic areas following standardized scientifically valid protocols.

The first survey is done by USFWS crews using fixed-wing aircraft along transect lines in relatively remote areas of southern Canada and Maine. The second survey is a ground survey done in the 11 northeastern states from New Hampshire/Vermont to Virginia. When this survey was designed by state biologists, they recognized the importance of "non-traditional" breeding sites for both mallards and Resident Population Canada geese, as well as the need to cover dense wetland forests for wood ducks. As such, this survey is done by ground/boat since these types of habitats cannot be adequately surveyed by aircraft. This ground survey is conducted across the same 1,300, one-square kilometer plots annually. Survey plots were randomly located when they were initiated, allowing biologists to extrapolate observations across the entire landscape. If mallards were for some reason choosing different breeding habitats over time, this survey would still detect the birds since the plots are randomly located.

### What are the trends from these two breeding population surveys?

Mallard numbers from the fixed-wing survey in eastern Canada are stable. However, mallard numbers from the plot survey in the northeastern U.S. declined about 38% since 1998. Since the number of mallards in the northeastern U.S. is greater than the number in eastern Canada, the total breeding population in eastern North America is declining at a steady rate of approximately 1% per year when these two survey areas are combined.

# Other than breeding population surveys, is there any other evidence that eastern mallards are declining?

Although breeding population surveys are typically the "go-to" data source when measuring trends for waterfowl, wildlife biologists have other ways to track population trends. For waterfowl, estimates from banding data and harvest trends (when hunting regulations and hunter effort are stable over time) are also used.

Population estimates from banding data suggest a similar steady decline in eastern mallards over the past 20 years and mallard harvest in the U.S. portion of the Atlantic Flyway has declined approximately 40% over the same time-period. With all the available population indices suggesting significant declines in mallard abundance, biologists have little doubt the decline is real.

### Why are eastern mallards declining?

The question of "why" eastern mallards are doing so poorly is more difficult to answer. Biologists are currently struggling with this question and working on identifying the factors that may be causing the population declines. There are some theories, including decline in winter feeding sites resulting in lower survival or fitness, decreases in habitat quality, and hybridization with game-farm mallards causing a change in morphology and survivability, but none of these hypotheses have been rigorously tested. Breeding population size in any year depends on how many birds from the previous year's population survived the full year (survival rate), and how many young-of-the-year birds from the previous year's nesting season made it through the winter and early spring (production rate). A long-term decline means that either survival or production (or both) is too low to maintain the population size. However, banding data indicate that eastern mallard survival rates are not measurably different now than they were in the 1990s, when the population was stable. Production estimates obtained from the USFWS Parts Collection Survey have not decreased from that time either. Yet the population decline is evident. This indicates there is a problem with either one or both critical data streams.

## Why are mallard and black duck limits both 2 per day when mallards seem to greatly outnumber black ducks?

Most hunters would be surprised to learn that eastern mallards no longer greatly outnumber black ducks. The main reason mallards seem much more numerous than black ducks is because of where they breed. The core breeding area for black ducks is in eastern Canada, whereas mallards have historically bred in high numbers in the Northeastern United States. So early in the season, prior to migration, mallards are what hunters are most likely to encounter in the field. In addition, as fall changes to winter, black ducks tend to have a narrower preference for wintering areas than mallards since black ducks tend to move to predominantly coastal salt marshes. Therefore, if your hunting areas are far from coastal marshes, you may see few black ducks after the peak of fall migration.

### Does the restriction on mallards impact the overall duck season length and bag limit?

No. general duck season length and overall bag limit in the Atlantic Flyway will no longer be set based on eastern mallard populations. If the USFWS and Atlantic Flyway Council chose to continue using the eastern mallard population status as the basis for overall duck season frameworks, the result would likely be closed or restrictive seasons as soon as 2019-20; that would be unacceptable given the population status of other important duck species. Over the past five years the Atlantic Flyway Council and USFWS have been proactive developing a new approach to duck harvest management by using an Adaptive Harvest Management strategy based on the status of 4 species (American green-winged teal, wood ducks, ring-necked ducks and goldeneyes) instead of relying solely upon the status of eastern mallards. As an introduced breeding duck to the Atlantic Flyway, mallards are not a good representative species of the population status and varied habitats used by of these more traditional Atlantic Flyway species that are also important to hunters. By moving away from a reliance on mallard population status to set the general duck hunting season, the objective is to continue maximizing hunting opportunity commensurate with the population levels of a more representative suite of duck species that breed and are harvested largely within the Atlantic Flyway. Biologists are seeking to implement Multi-stock Adaptive Harvest Management for the 2019-2020 hunting season, similar to the change in the mallard bag limit.

#### Will there continue to be a hen restriction?

The Atlantic Flyway Council and USFWS have not adopted a formal recommendation for a hen restriction with the change to a 2-bird bag limit for mallards in the Atlantic Flyway. Biologists are assessing biological and scientific data (hunter diary data, harvest surveys, banding data, etc.), as well as gathering input from hunters before making a final decision.

A final decision on whether to continue a hen restriction will be made during the Fall of 2018 to be implemented during the 2019-2020 hunting season.

#### How long will the bag limit remain at 2-birds per day?

There is no set timeline for how long the mallard bag limit will remain at 2-birds per day. For now, the change is viewed as an interim bag limit while biologists re-evaluate all the available data to develop a more reliable population model and harvest strategy. The hope is that mallard populations respond to the decreased harvest pressure and eventually there will be additional opportunity for more liberal bag limits. The development of a new harvest strategy for mallards should likely take at least 2 years.